

ON A LIZARD AND THREE SPECIES OF
SALARIAS, &c.

BY

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THE QUEENSLAND Museum has been frequently indebted to two zealous friends, Mr. F. A. Blackman and Mr. D. Macpherson, for apparently new forms of vertebrates—more especially those which belong to tribes which are but too liable to be overlooked by observers to whom size or utility are the chief attractions.

Mr. Blackman keeps a watchful eye upon, amongst other things, the smaller lizards, and we have no reason to fear that his pursuit of them will cease for lack of interesting objects. That particular lizard for example which he now enables us to study is an addition to the number of lines connecting the Scincs with the Pygopidæ. The latter are one of the peculiarities of the Australian fauna, and it is in that fauna rather than any other that we may expect to find whatever intermediate forms may be extant, and several are already known, between the comparatively stout and strong-limbed *Hinulias* and the nearly limbless and snake-like *Pygopus* or *Lialis*. Every link of this kind is of great morphological interest: and, theoretically considered, adds another to the difficulties of special creation. The lizard before us, collected by Mr. Blackman at Breakfast Creek, near Brisbane, fails to effect an entrance into any one of the genera known to the writer. It is excluded from *Lygosoma* and its nearer allies by the absence of a visible ear; by virtue of its full complement of toes, together with its scaly lower eyelid, it stands apart from *Cheilomeles*; and even from its nearest affine the Javan genus, *Podophys*, it is differentiated by

the simple squamation of its lower eyelid, the subrhomboidal form of its nasal, the non-triangular shape of its interoccipital, the unequal length of its toes, and the total closure of its aural orifice. We are therefore constrained to give it, provisionally, at least, a place and binomial of its own.

SCINCIDÆ.

LYGOSOMINA.

CALYPTOTIS, *n.g.*

Habit, elongate, subcylindrical; limbs, distant, weak; toes 5/5 short, unequal, clawed; ear orifice, none; lower eyelid, scaly; supranasals, none; scales, smooth; nasals, lateral, distant, in a subrhomboidal shield.

CALYPTOTIS FLAVIVENTER.

Head, subtriangular, broader posteriorly than the neck, which is rather long. The rostral shield rises with an obtuse angle on the muzzle to the level of the fore-edge of the nasal orifice. The nasal orifice is round, and in the middle of the nasal shield. The prefrontal is long, covers the muzzle behind the rostral, and joins the loreal laterally with a long, straight suture. The base of the frontal is undulated to occupy the concave posterior edge of the prefrontal; its sides converge to an acute posterior angle. The parietals are trapeziums; the interoccipital is moderately large. Labials, 6/6. Two large temporals, the anterior descending between the fifth and sixth labials. Mental, large, succeeded by four pairs of submandibular shields, of which the anterior pair are mesially conjoined. There are twenty-two rows of scales at the middle part of the trunk. The scales of the back and belly are subequal and hexagonal. The mesial row of subcaudals is larger than the others. The preanals are but slightly, if at all, enlarged. The distance between the limbs is rather more than twice that of the fore-limb from the tip of the snout. The length of the hind limb is rather more than one-third of the distance between the limbs. Tail considerably longer than the body and head together, but variable in length.

Colour, above shining brown; on the back, six black lines, one traversing each row of dorsal scales; below, yellowish, with a conspicuous patch of bright salmon colour, or red, before or behind the vent; tail beneath, whitish, flecked with black; flanks speckled with black; face and lips with black and white. Length, 11 c.m. *Loc.* Breakfast Creek (*F. A. Blackman*); Macleay Island, Moreton Bay (*H. Tryon*.)

The very natural group of Blennies, passing under the name *Salarias*, though by no means so prolific in species foreign to Australia as the typical genus, is almost as numerously specialized in Queensland waters. What peculiar conditions may favour their multiplicity therein is yet to be ascertained—indeed, all the writer has been able to learn of their habits is that they hide beneath stones, or shells, or in the rock perforations left by boring mollusca, whence they dart out after their prey; that out of water they are extremely agile, leaping over the bare rocks, by the resilience of their scaleless body, in such a manner as almost to elude capture; and that they turn ferociously on the capturer, with the design, often successful, of burying their long fangs in unwary fingers. Several species have been recorded from Moreton Bay, and to these may now be added three which, as well as the rest, have been made known to us by Mr. D. MacPherson.

SALARIUS LUPUS.

D. 30, A. 20.

The height of the body and length of the head are each 5 in the total length. Dorsal not notched, higher anteriorly, the third ray being three-fifths of the height of the body, the web behind the last ray not reaching the base of the caudal fin. No crest on the nape, nor tentacles on the head. A short simple filament, half as long as the diameter of the eye, over the orbit; another, still shorter, at each anterior nares. Profile of nape and vertex, oblique; of muzzle, convex. Lower canines, large; upper canines, small. Caudal subtruncate, slightly

rounded. Ground colour, yellow; immaculate on the caudal and pectoral fins; trunk densely marbled with blackish-brown, the marblings forming a line of nearly confluent large blotches on the back; dorsal and anal fins spotted on the rays and marbled on the webs with blackish-brown; no definite markings on the head. This fish is closely allied to, possibly identical with *S. viperidens*, mihi, from Cape York. In describing that fish (Proc. Lin. Soc. N.S. Wales, Vol. IX., p. 697) I omitted to mention a short fimbriated tentacle on the orbit, and a pair of very short submental tentacles. The chief differences between *lupus* and *viperidens* are the simple orbital and nasal tentacles of the former, and the absence of submental filaments, the greater anterior elevation of the dorsal, deeper form, yellow-ground colour, and a much less development of the mandible at the base of the great canine—a conspicuous feature—in *viperidens*.

SALARIAS GALEATUS.

D. 30, A. 22.

The dorsal fin is distinctly emarginate. An elevated occipital crest is continued forwards between the orbits. A long lower canine is set unusually backwards towards the rictus. There is no upper canine. A row of papillæ surround the orbit, but tentacles are altogether absent. The height of the body is $5\frac{1}{3}$, the length of the head 5, in the total length. The head and trunk are much compressed. The anterior part of the dorsal fin is rather low; the posterior elevated higher than the body and subfilamentose. The caudal pointed and subfilamentose. Colour, dark brown, with black spots on the trunk disposed in irregular lines. The anterior dorsal with a series of dark oblique lines. The anal with or without short longitudinal white lines. On the trunk are mesially curved and backwardly elongated white lines, the most posterior forming two parallel lines on the caudal peduncle or these markings may appear as dark lines on a pale brown ground colour, which becomes still paler on the caudal peduncle.

SALARIAS FURTIVUS,

D. 34, A. 24.

The preabdominal height of the body is $6\frac{3}{4}$, the length of the head $6\frac{1}{4}$, in the total length; dorsal not notched, of uniform height, about half as high as the body, and not reaching the caudal fin. No crest nor tentacles whatever. Lower canines long; upper ones short. Anterior profile of head, from upper edge of orbit to the muzzle, rather oblique. Caudal fin, short, rounded. Ground colour, yellow, with three or four rows of small faint dark spots on the hinder part of the body, and a row on the back below the dorsal fin. Anterior dorsal, with a dark blotch on each ray and adjacent part of web near the base; soft dorsal, with three or four longitudinal dark stripes. A dark spot behind the eye. In a third specimen, the cheeks and chin are spotted; the spots on the body are more conspicuous and form a mesial line of larger spots of which the spot behind the eye is the commencement. On the other hand, the markings of the dorsal fin are faint. The anal is black edged.

OBJECTS EXHIBITED.

Dr. Bancroft exhibited—(1), Moths of a grass-green colour, which had been bred from specimens of a caterpillar which he had observed to be very destructive to the foliage of the “bitter-bark,” *Alstonia constricta*. (Dr. Bancroft also alluded to the growing reputation which this bitter-bark was attaining, both in Europe and America, and stated that this was partly due to the fact that chemists in Germany had made it a subject of thorough investigation. He also remarked that it was likely to supersede both quinine and strychnia for the purpose of giving tonicity to the stomach in cases of fever). (2), A sample of a very valuable rice—the celebrated American “Golden Hull”—procured from plants which had been self-sown in a swamp near Brisbane. (3), A scapular of a large turtle, derived from an